



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,216	10/23/2003	Raymond W. McCollum	MS306454.1/MSFTP518US	8223
27195	7590	08/19/2005	EXAMINER	
AMIN & TUROCY, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			NGUYEN BA, HOANG VU A	
			ART UNIT	PAPER NUMBER
			2192	

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,216

Applicant(s)

MCCOLLUM ET AL.

Examiner

Hoang-Vu A. Nguyen-Ba

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-40 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/13/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

PD

DETAILED ACTION

1. This action is responsive to the application filed October 23, 2003 and preliminary amendment filed July 27, 2004.
2. Claims 1-40 have been examined.

Oath/Declaration

3. The Office acknowledges receipt of a properly signed oath/declaration filed October 23, 2003.

Priority

4. The priority date considered for this application is October 23, 2003.

Information Disclosure Statement

5. The Office acknowledges receipt of the Information Disclosure Statement filed Mar 13, 2004. It has been placed in the application file and the information referred to therein has been considered.

Drawings

6. The drawings filed October 23, 2003 are accepted by the Examiner.

Specification

7. The specification is objected to because of the following minor informality:
The filing date and assigned U.S. Patent Application Number of the two applications listed in [0089] are missing.

Claim Objection

8. Claims 3, 17, 18, 24, 25, 36 and 40 objected to because of the following informalities: replace the phrase “one or more of the” with – one or more of the following: –

Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 33 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 33 recites the limitation “the system administrator” in line 4. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Long*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1993); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Voge*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminated disclaimer in compliance with 37 CFR 1.103(c) 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1, 23, 24, 26, 27, 36, 38 and 40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 20, 21, 22, 31, 33 and 34 of U.S. Patent Application No. 10/692, 432. Although the conflicting claims are not identical, they are not patentably distinct from each other because the inventions claimed in these conflicting claims are obvious variants of each other, as can be seen in the following table(s).

Instant Claim 1	Copending Claim 1
A model-based management system for managing an application or service, comprising:	A system that facilitates management of an application or service, comprising:
a description component that describes the application or service in terms of its constituent components, and desired states in terms of at least one of the functionality, configuration, system resource utilization, security, and performance; and	an attribution component that facilitates attributing code of the application or service with management information

management service component that uses the description component during installation of the application or service to configure itself	where the system uses the management information to manage the installed application or service; an application or service for installation on the system
----------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------

13. Claims 1, 23, 24, 26, 27, 36, 38 and 40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 17, 25, 31 and 42 of U.S. Patent Application No. 10/693,838. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention claimed in these conflicting claims are obvious variants of each other, as can be seen in the following table(s).

Instant Claim 1	Copending Claim 1
[A model-based management system] for managing an application or service, comprising:	A method comprising:
a description component that describes the application or service in terms of its constituent components, and desired states in terms of at least one of functionality, configuration, system resource utilization, security, and performance;	using a system definition model to design a system; subsequently using the system definition model to deploy the system on one or more computing devices; and
a management service component that uses the description component during	after deployment of the system, using the system definition model to manage the

installation for the application or service to configure itself.	system deployed on the one or more computing devices.
------------------------------------------------------------------	-------------------------------------------------------

14. Claims 1, 23, 24, 26, 27, 36, 38 and 40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 20, 21, 22, 31, 33 and 34 of U.S. Patent Application No. 10/789,440. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention claimed in these conflicting claims are obvious variants of each other, as can be seen in the following table(s).

Instant Claim 1	Copending Claim 1
A model-based management system for managing an application or service, comprising:	A design tool comprising:
a description component that describes the application or service in terms of its constituent components, and desired states in terms of at least one of functionality, configuration, system resource utilization, security, and performance;	a service definition model to enable abstract description of distributed computing systems and distributed applications; and
a management service component that uses the description component during installation for the application or service to configure itself.	a schema to dictate how functional operations within the service definition model are to be specified, wherein the functional operations include design of distributed applications, deployment of

	distributed applications, and management of distributed applications.
--	-----------------------------------------------------------------------

15. These are provisional double patenting rejections since the conflicting claims have not yet been patented.

Claim Rejections - 35 USC § 101

16. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

17. Claims 1-22, 24-25 and 36-37 are rejected under 35 U.S.C § 101 because the claimed invention is directed to non-statutory subject matter.

Pursuant to these claims, the term “system” is interpreted in light of the specification ([0030]), which indicates that the terms “component” and “system” are intended to refer to a computer-related entity, either hardware, a combination of hardware and software, or software in execution ([0030]). Hence, a model-based management system recited in Claims 1-22, 24-25 and 36-37 can be construed to be merely software.

The model-based management system recited in Claims 1-22, 24-25 and 36-37 merely recites a system comprising a description component, a management service component, a model component, a manifest component, a management system component, a tasks component, a means for describing, a means for expressing and a means for identifying. These components are merely software components, i.e., computer programs per se. Such claimed matter, which is non-functional descriptive

material *per se*, is not statutory because it is not a physical “thing” nor a statutory process as there are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed aspects of the invention which permit the computer’s program’s functionality to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer, the program itself is not a process, without the computer-readable medium needed to realize the computer’s functionality. In contrast, a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program’s functionality to be realized, and is thus mandatory. *Warmerdam*, 33 F.d at 1361, 31 USPQ 2d at 1760. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978). See MPEP § 2106 (IV)(B)(1)(a).

On this basis, claims 1-22, 24-25 and 36-37 are rejected under 35 U.S.C. § 101.

Claim Rejections – 35 U.S.C. § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

19. Claims 1-17 and 21-40 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ravindran, *Engineering Dynamic Real-Time Distributed Systems: Architecture, System Description Language, and Middleware*, January, 2002.

Claims 1, 23 and 40

Ravindran discloses at least:

a description component that describes the application or service in terms of its constituent components, and desired states in terms of at least one of the functionality, configuration, system resources utilization, security and performance (see at least Abstract, Introduction, Section 7. System Description Language); and

a management service component that uses the description component during installation of the application or services to configure itself (see at least Abstract, Introduction, Section 5. The Resource Management Architecture).

Claim 2

Ravindran further discloses *the management service component ensures availability of the application through management actions that include at least one of configuration management, problem detection, diagnosis, and recovery (see at least Introduction, p. 31, left column LC, end of 2nd ¶; Section 6.1).*

Claim 3

Ravindran further discloses *the description component comprises a models component that models one or more of the constituent components, health states and recovery, configuration settings, and administrative tasks (see at least Introduction, p. 31, LC, 2nd, 4th ¶s; Sections 6.2, 7).*

Claim 4

Ravindran further discloses *the description component comprises a manifest component that contains information associated with models and source code attribution in a machine-readable*

form for use by the management service (see at least Introduction; Section 7, p. 37, left and right columns LRC).

Claim 5

Ravindran further discloses *the description component comprises a management component that comprises multiple services configured from information received from an application manifest* (see at least Introduction; Sections 5, 7).

Claim 6

Ravindran further discloses *the description component comprises an administrative task component that includes administrative tasks defined in an application manifest* (see at least Introduction; Sections 5, 7).

Claim 7

Ravindran further discloses *the description component comprises an attribution component that facilitates inserting attribution data in source code to indicate instrumentation and logic for monitoring aspects of the application* (see at least Introduction; Sections 5, 7).

Claim 8

Ravindran further discloses *the description component comprises a management system component that uses the desired states expressed in a manifest* (see at least Introduction; Sections 5, 7).

Claim 9

Ravindran further discloses *the management component uses the desired states as modified by an administrator* (see at least Section 5, p. 33, RC, 3rd ¶).

Claims 10, 28 and 39

Ravindran further discloses *the desired states verify dependencies and install only necessary files, settings, and security data* (see at least § 5, 7).

Claims 11 and 39

Ravindran further discloses *one or more of the desired states subscribes to events and forward the events according to a predetermined specification* (see at least § 5).

Claims 12 and 30

Ravindran further discloses *one or more of the desired states periodically collect at least one of instrumentation data and counter data* (see at least § 5).

Claims 13 and 31

Ravindran further discloses *one or more of the desired states perform automatic management tasks* (see at least § 5).

Claims 14 and 32

Ravindran does not specifically disclose *one or more of the desired states restrict access to program functions*. However, this feature is deemed inherent to Ravindran teachings of monitoring quality of service (QoS) (see at least § 5) for detecting components of tasks that are causing low QoS and of recovering from these low QoS. In order to recover from and subsequently prevent low QoS, access restriction to program functions, which would cause potential low QoS, must necessarily be implemented in Ravindran teachings.

Claims 15 and 33

Ravindran further discloses *one or more of the desired states perform at least one of detecting problems, diagnosing root causes, taking corrective action, and notifying an administrator when intervention is necessary* (see at least § 5, 6.1).

Claims 16 and 34

Ravindran further discloses *one or more of the desired states customize policy for use with a plurality of different computers* (see at least Introduction, first two ¶s).

Claim 17

Ravindran further discloses *a rules definition language (RDL) that enables defining a rule for monitoring availability of software and hardware components, the RDL facilitates at least one of problem testing, diagnosis, resolution, verification, and notification* (see at least Introduction; Sections 5, 6.2, 7).

Claim 21

Ravindran further discloses *an attribution component that facilitates attribution of source code for monitoring health of the application* (see at least Section 7).

Claim 22

Ravindran further discloses *an attribution component that facilitates determining which parts of source code is used to determine and/or correct health, and when to execute monitoring rules* (see at least Section 7).

Claims 24, 26 and 36

Since Claims 24, 26 and 36 recite a combination of the same features of Claims 1a, 3, 4, 5, 6 and 8, the same rejections are thus applied.

Claim 25

Since Claim 25 recites a combination of the features of Claims 14, 15, 9, 11, 12, 10 and 13, the same rejections are thus applied.

Claims 27 and 38

Since Claims 27 and 38 recite a combination of the same features of Claims 3, 7, 4, 5 and 8, the same rejections are thus applied.

Claim Rejections – 35 USC § 103

20. The following is a quotation of the 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ravindran as applied to base Claim 1 and intervening Claims 8-9, in view of Berners-Lee et al. ("BL98"), Uniform Resource Indentifiers (URI): Generic Syntax, August 1998.

Claim 18

Ravindran does not specifically disclose *a uniform resource identifier (URI) employed to uniquely identify at least one of an abstract resource, a physical resource, and a location of resources*. However, BL98 describes a “superset” of operations that can be applied to URI, which provides simple and extensible means for identifying a resource. BL98 thus defines a grammar that is a superset of all valid URI, such that an implementation can parse the common components of a URI reference without knowing the scheme-specific requirements of every possible identifier type (see at least Abstract). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use BL98 in Ravindran for the purpose of facilitating the adaptability of application functionality to changes, adaptability that would be improved by the use of a generic URI syntax.

Claim 19

Ravindran does not specifically disclose *a URI template, which URI template allows a probe to be identified and characteristics of the probe understood without retrieving the probe*. However, BL98 describes a “superset” of operations that can be applied to URI, which provides simple and extensible means for identifying a resource. BL98 thus defines a grammar that is a superset of all valid URI, such that an implementation can parse the common components of a URI reference without knowing the scheme-specific requirements of every possible identifier type (see at least Abstract). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use BL98 in Ravindran for the purpose of facilitating the adaptability of application functionality to changes, adaptability that would be improved by the use of a generic URI syntax.

Claim 20

Ravindran does not specifically disclose *an instrumentation catalog that utilizes a URI template to describe instrumentation without referring to a specific instance*. However, BL98 describes a “superset” of operations that can be applied to URI, which provides simple and extensible means for identifying a resource. BL98 thus defines a grammar that is a superset of all valid URI, such that an implementation can parse the common components of a URI reference without knowing the scheme-specific requirements of every possible identifier type (see at least Abstract). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use BL98 in Ravindran for the purpose of facilitating the adaptability of application functionality to changes, adaptability that would be improved by the use of a generic URI syntax.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu “Antony” Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on Tuesday-Friday, 6:45 to 16:45.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam can be reached at (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Anthony Nguyen-Ba". The signature is written in a cursive, flowing style.

ANTONY NGUYEN-BA
PRIMARY EXAMINER

Art Unit 2192

August 16, 2005